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Preparation of Masters in the Russian Educational System in the Context of Modern Social Challenges

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Abstract

The relevance of the issue under study lies in meeting global, national and regional challenges of modern time in the course of vocational preparation of Master's degree students. The purpose of article is to define psychological and pedagogical conditions that have an impact on the process of teaching Masters of Education in the context of social challenges and the created portrait of a student of Southern Federal University as a consumer of educational services. As for these psychological and pedagogical conditions, we would like to refer to the concept of pedagogical education development approved at Southern Federal University; the strategy of preparing Masters in the direction "Pedagogical Education"; the stakeholder-focused model of Masters' preparation. The devised psychological and pedagogical conditions were step by step discussed by the professional community of Southern Federal University and invited employers. Research findings define its practical importance: in the course of the conducted research, the authors have worked out, systemically described, put into practice and presented the results to the professional community for independent assessment at a conference, a round table and a pedagogical forum.

Keywords: education, pedagogical education, global education, preparation of Masters, information technologies, digital environment, higher education, social challenges, educators, education stakeholders.

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Introduction

The problem of preparation of pedagogical staff is connected with a number of major challenges which require scientific judgment and need for search of new strategies, models of shaping an image of a new type of teacher that will possess certain professional competences to meet modern megatrends.

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As for global social challenges, we would like to mention digitalization of social life; mobility of human resources; access to diverse information; merge of business and education; active development of technologies. As for the nationally specific and federal challenges that affect Masters' preparation, the most significant ones include development and implementation of the national projects aimed at social and humanitarian technologies; strengthening of the importance of social and economic features of the region and understanding tasks of professional activity in these conditions and including these aspects into curriculum of Master's programs. What is more, multiculturalism and multi-confessional nature of the region determine the need to prepare Masters for solution of certain tasks connected with development of the Russian civil identity, support of cultural traditions and ethno-cultural diversity in educational environment.

All the above-stated challenges cannot help influencing the process of training future Masters of Education at Southern Federal University. The first priority is development of meta-competences (ability to communicate freely in the native and foreign languages, ability to be creative, good leadership skills) and life skills (safety which is considered to be the universal algorithm of actions in certain situations, self-determination in a chosen profession, ability to work in a team, the conscious choice as the key skill that guarantees competitiveness). The second aim is concerned with participation of teachers and students in development and implementation of the Russian national and international projects ("Digital school", inclusive education, formation of emotional and cultural intelligence of students, etc.) and social partnership (between employers and higher educational institution, small and medium businesses and higher educational institutions, institutions of culture and higher educational institutions). Asynchronous education of Masters within an educational system is also vital in this respect since it assumes development of individual educational trajectories, flexible modules in personal educational programs with the content which is relevant for solution of global social problems, i.e. ecological, information and safety related, etc. The third area refers to realization of online, digital, advancing, collaborative and project-based technologies, technologies of support and assistance for different categories of students (gifted children, children with special health opportunities and educational needs, children from migrants' families, etc.). Facing up to the modern challenges, in the talk at All-Russian Professorial Forum (Moscow, February 6-7, 2019), M.A. Borovskaya, the deputy minister of science and higher education of the Russian Federation, A.N. Shokhin, the President of the Russian union of industrialists and businessman, cochairman of RPS, voiced an offer to introduce digital competences into all professional standards.

As for an education system, not only competences, but also ability to get knowledge independently by electronic means, to study all life, to create a digital portfolio should result from Masters' preparation. Finally, we would like to mention the need to ensure continuity of professional and additional education of Masters.

Literature review

The system of Masters' preparation takes into consideration modern social challenges of international and national levels. Researchers dwell on global challenges which underpin modernization processes in preparation of Masters in Pedagogical Education such as (Nalivayko et al., 2010; Ushakova 1988):

- need for development of industrial strata (connections with small and medium business, development of the advanced industrialization for carrying out researches) with social partners and investors for implementation of educational projects;
- expansion of network social contacts, involvement of youth from other countries and regions,

creating conditions for their academic mobility by development of necessary professional competences and sociocultural training;

- digitalization of education as a way of teaching Masters to carry out independent search for knowledge necessary for research activity and generating ideas seen as a tool for development of critical thinking skills and professional competences;

- the problem of export of educational services and developing technologies on the international educational market, also referred to as the market of pedagogical professions, which demands differentiation of educational programs at Master's level into practice-focused and research-focused programs;

- inclusive and bilingual education as the phenomena of educational space also demands preparation of Masters for work with various groups of children – normally developing, gifted, physically challenged, with developmental disorders, with problems in social adaptation, etc.;

- current trends also dictate new forms of interaction of an education system with employers and business community being social partners in preparation of pedagogical staff;

- transformational processes in the world (Global education, World skills) define requirements to new competences and new education technologies (creating global projects, organization of nonlinear learning, strengthening general cultural content of pedagogical education, integration of scientific research into the curriculum; etc.).

Modern researches deal with issues of the influence of Master's preparation in the field of education on development of the Russian society, science, culture and innovative economy. In this respect, Yu. Malenkov emphasizes that graduates of Master's level possess "high added value, that is "a set of useful qualities in the form of knowledge, skills, creative abilities and competences acquired in the course of studies that create conditions for innovative and effective development of economy, science and education" (Malenkov 2008: 34-35). Yu. Malenkov stresses the importance of preparation of Master's degree holders for research activity which has a huge impact on research competence as the basis for innovative nature of future professional activity.

V.I. Panarin sets forth 8 ideas on preserving education in Russia in the 21st century which he sees as a sociocultural ideology and a force that enables to preserve public administration in the century of global challenges (Panarin 2009):

1. Russian education has to be complete, multilevel, advanced, and culture-congruent in terms of its true history.

2. Education has to be understood as integration and integrity of education and moral instruction.

3. Education has to be general to make the population cultural and educated, capable to solve modern social problems.

4. Education has to combine attitudinal and ideological, social and humanitarian, scientific and technical modules.

5. Education has to combine sociocultural traditions and innovations aimed at prosperity of the country and foster the parity relations with other countries of the world.

6. Education has to assimilate the best world achievements for the good of the people and international community for finding solution to global problems of mankind.

7. Education has to resist aggressive, extremist and other destructive influences.

8. Education has to be open to international community, participate in creation and implementation of the world sociocultural projects, improving life of people and the planet in general.

Bryzgalina E.V. notes that "at the level of global education trends, it is clear that science as the

background of education content has changed; that it is impossible to unambiguously describe and control the reality. Therefore, the focus has to be shifted to self-control in different situations. Education is guided by preparation of people for uncertain and, substantially, not regulated and unpredictable future” (Bryzgalina 2012: 14).

The above stated ideas define new strategies for pedagogical education development. Globalization of economies demands preparation of competitive pedagogical staff capable to solve modern tasks set by society, personality and education and to make Russian higher education keep up with global trends in education development.

Analysis of theoretical researches (Abramova et al., 2017; Barinova 2017; Kolodeznikova, et al. 2017; Kabulov 2017; Yarygina 2017) and educational practice of preparing Masters as well as requirements of employers, allowed revealing a number of problems in the course of preparation of pedagogical staff at Master’s level:

- social problems – the content of preparation of Master’s degree holders does not respond to social challenges as well as to the condition of educational practice and social relations in the educational organization arising in the teacher-pupil-parent system;

- standard – lack of modern provisions; methodical guidelines about development of educational programs (EP) for teaching Masters do not provide scientific and methodical grounds for design of educational tracks and mobile modules to reflect substantial, technological and organizational features of educational process at various education levels;

- national – the national educational policy is focused on development of national projects as a way of introducing innovative projects for modernization of teaching, moral instruction and personal development, maintaining national traditions and values of the Russian higher education and their integration with global education trends;

- technological, connected with technologies of teaching, moral instruction and overall development of students which in general have no advanced and breakthrough character, do not meet requirements of educational organizations, in particular, of digital or inclusive education, and are not used in preparation of Masters.

Scientists unanimously agree upon the idea that at the background of global trends it is necessary to keep national traditions of Russian education which has always served the ideas and ideals of our Motherland. The research conducted in Southern Federal University is focused on realization of this position of scientists in the course of Masters’ preparation.

Methodological grounds

1.1. Research objectives

The conducted research aims at development and implementation of psychological and pedagogical conditions for ensuring quality of preparing Masters of Education according to social challenges. As for experimental base of the research, it is academic setting of Southern Federal University, its structural division Academy of Psychology and Pedagogics. Participants of the experiment include 562 Master degree students majoring in 44.04.01 Pedagogical Education, 23 heads of educational programs at Master’s level at SFU.

1.2. Research methods

In the course of the research, the authors used methods which enabled them to resolve the revealed problems, to achieve goals, to define conceptual ideas for development of the new concept and strategy of Educational Standard of Southern Federal University. These methods include: theoretical methods of

comparative and systematic analysis, content analysis of the standard and legal documents that reflect the demand of society for an education system; the content analysis of scientific papers that reflect current trends in pedagogical science related to teaching master degree students; scientific analysis and systematization of social, educational, methodical challenges and trends.

1.3. Research stages

The research includes three stages. At the first investigation phase the theoretical analysis of the existing methodological approaches to teaching Masters in the system of higher education was carried out. At this stage the key research problem was formulated: what are psychological, pedagogical and methodical conditions required for training a competitive Master's degree holder ready to meet modern challenges.

At the second research phase, the authors held a pedagogical experiment during which psychological and pedagogical conditions for preparation of Master graduates for an education system taking into account the revealed social calls were scientifically approved. The results include the following strategically relevant provisions: the concept of development of pedagogical education in Southern Federal University; the strategy of teaching holders of Master's degree in Pedagogical education; the stakeholder-focused model of training masters at Southern Federal University.

At the third research phase, the authors conducted comparative analysis, systematization of the received empirical material, qualitative and quantitative data processing, defined efficiency of psychological and pedagogical conditions and their impact on learning outcomes and competences appropriated by Masters, dwelled on prospects for further research of the issue under study.

Results

As a result of the research experiment, the key social challenges which changed the process of Masters' preparation are defined and compared to "The complex portrait of Southern Federal University students" (Aslanov, et al, 2013). The research showed that in future modern young people plan to set up their own business (37%), work in public service (24%), at a commercial enterprise (15%), at budgetary organizations (10%), prefer freelancing mode (3%), found it difficult to answer (8%), mentioned other options (2%). These data demonstrate that those professional implications, with which students enter a university, develop, get specified and give them more confidence. The fact that the majority are plan to work in their own businesses is caused by high ambition of youth, their aspiration to independence and adequate earnings to match the received education. Many students (more than half of respondents – 58.7%) use Internet resources for job search (Head Hunter, Superjob) which will allow them to gain the competences necessary for the preferred professional field. For the same purpose, they ask acquaintances and relatives for help (40.7%), use head hunting services (18%). The Career Center of Southern Federal University and career services of separate faculties are hardly popular (7.2% and 2.4%, accordingly).

Development of professionally focused world outlook of students, unlike school leavers, can be expressed by such statements, as:

- one should spend a considerable part of life only doing interesting work (42.2%);
- if one works hard, in the long run it will lead to improvement in standard of living (31.6%);
- persistent work does not lead to success - it is the result of good luck and personal contacts (11.9%);
- the main thing in work is how well it is paid for (10.7%).

Analyzing these ideas, it is possible to draw a conclusion that according to students, work as a public benefit has to be, first of all, interesting. University applicants mostly focus on work as a source of prosperity.

Nevertheless, when choosing the place of work students, refer to remuneration as the most relevant factor. 46.3% are ready to choose interesting work with low salary, while only 29.9% would prefer uninteresting, but highly paid job.

Career aspirations of applicants are connected with receiving a worthy position. Students' expectations become more realistic. Students of SFU answered the question "How would you estimate career expectations of your groupmates in?" in the following way:

- the youth is realistic about their knowledge and experience (32%);
- expectations of youth are overestimated (23%);
- modern youth is not ambitious, it is more aimed at idle pastime than at career (18.5%);
- found it difficult to answer 13.5%;
- career expectations of youth are underestimated (12.4%).

The received results demonstrate approximate coincidence of the ratio of applicants and students focused on career achievements. At the same time, many students after several courses of studies and practical training are more realistic in their estimations.

Undergraduates and graduates consider higher education as a social benefit demanded by employers. Thus, students claim:

- employers appreciate higher education, but experience is more important (51.4%);
- higher education always matters (33.3%);
- successful employment is defined only by practical skills (13%).

Majority of students (51.4% and 13%) consider practical experience valuable and try to get jobs during their studies at higher educational institutions. Disappointment with part-time work in the course of studies can be one of the factors why 55.4% of the interviewed students of SFU are ready to go abroad to find better jobs, 40.1% are willing to move to Moscow or St. Petersburg, 33.9% want to move to a larger city.

In the course of studies at higher educational institutions, undergraduates shape professionally focused worldview which performs integrating function, combining separate knowledge and skills, the ways of acquiring knowledge in various educational situations in the uniform integrity (Kulikovskaya 2013). In this process, the structure subject-based activity gradually turns into the structure of consciousness. The world of a profession is given through the prism of categories which define its essential features. The professionally focused worldview is the mechanism of complete regulation of professional growth and relates to certain personal features.

Preparation of Masters at Southern Federal University in the context of modern realities and challenges demands development of the new Concept of development of pedagogical education, reflecting the purposes, tasks, mission and direction of development of pedagogical education. Strategic objectives of the Concept refer to the vector of development of pedagogical education of a new type associated with innovation, competitive and corporate culture, socially open nature, psychological safety.

The main objectives of the Concept of development of pedagogical education in SFU include:

1. Implementation of the cluster policy in development of professional pedagogical community of the southern region.

2. Expansion of space of the Educational cluster to promote network interaction of SFU and other educational organizations, governing bodies of the South of Russia, the Ministry of general and professional education of Rostov region.

3. Development and implementation of the SFU standard on Pedagogical education and system

mechanisms of quality management of continuous education.

4. Updating resources of social partnership in the Russian, regional, international educational space for ensuring high quality of preparation, professional development and professional retraining of pedagogical staff.

The new mission of pedagogical education can be traced in the following statements:

- focus on the national status and humane mission of a teacher who is responsible for creating human assets of society, for social and safe development;
- creation of scientific and academic space for developing pedagogical elite on the basis of integration of cultural and historical traditions, innovations, accumulation of intellectual, spiritual and moral resource of Russia and the best world practices;
- giving students an opportunity to choose an individual educational trajectory with regard to development of modern technologies of pedagogical activity;
- meeting the demands of individuals, society, state for competitive educators capable to work in the context of global and national challenges;
- development of the high level of personal and professionally significant qualities in future teachers via inclusion of students into sociocultural practices and project activity;
- creation of social partnership between educational and scientific organizations, governing bodies, small and medium business for the sake of organization of corporate network of scientific, educational, training and professional centers, creative laboratories, schools of sciences, educational technological (EdTech) startups, quantoriums, regional independent public institutions of monitoring and examination of pedagogical education quality.

The concept of development of pedagogical education determined requirements to preparation of Masters in Pedagogical Education as a new type of teacher who can be defined by the following concepts:

- “teacher – culture carrier” who is ready to implement culture-congruent concepts and the system of general human values into academic setting;
- “teacher as a resource of society”, possessing certain advancing competences which correspond to social, economic and educational challenges, modern humanitarian breakthrough technologies of modernization in education;
- “teacher – creator of new pedagogical philosophy” who is well aware of the changed mission and position of a teacher in modern society, has a civic stand, social responsibility for the quality of the solved education-related tasks;
- “teacher – designer” of new education realities, capable to come up with innovative projects, educational processes, systems and environments, ready to work effectively in the digital environment of school, to react flexibly to the changing trends in educational space, to organize and provide quality of education in the system of continuous education at all its levels;
- “teacher – moderator” capable of managing the system of relations within student communities;
- “teacher – researcher” who is actively participating in research projects, development and realization of national projects, business projects in the created educational cluster, attraction of investments and export of educational services;
- “teacher – IT conductor” who follows modern trends in education and understands one’s moral and social importance and role in educational environment – “from a teacher who knows to a teacher who can”;
- “teacher – forecaster” ready to forecast the future of professional activity, purposes and work

outcomes in the conditions of mixed, inclusive and bilingual teaching, continuous education, self-education and an individual educational trajectory.

Pedagogical strategy is aimed at development of professional competences in terms of project activity, psychological and pedagogical support of students that follow individual educational trajectories, taking into account the principle of individualization, support of educational requirements, professional interests of future Masters, independence and initiative of Master's degree students in search for new knowledge and technologies for. "The valuable core" of pedagogical strategy concerns its importance for personal development of every student and focuses on development of the human capital of society:

- pedagogical education in the Russian state is a soft geopolitical power able to change the state of economy, society and personality;

- priority purpose of pedagogical education is the value of personality as a future teacher and a vector of professional development and professional self-education in the modern world with focus on global, national, regional trends and challenges;

- pedagogical education is always focused on the future - on development of the human resource of society which in turn can guarantee civilized and sustainable development of the planet Earth;

- integration processes happening in global educational space inevitably cause integration processes in science, education, social and economic aspects of people's life which also defines target landmarks of pedagogical education at Master's degree level.

During the forming stage of an experiment, the authors developed the stakeholder-focused model of teaching Masters in the field of education. Master's degree level refers to educational space for preparing teachers for an education system. This model considers the educational program as "a field" of responsibility of a wide range of interested parties (students, parents, teachers, scientists, researchers, employers, representatives of business community, investors, representatives of other higher educational institutions, etc.). Stakeholders act as the parties interested in ensuring high quality of Masters' education whose contributions (work, resources, etc.) lay the foundation for success of professional training. The interests of stakeholders are connected with investments of resources in high quality education; they act as independent experts of both the academic process and high quality of higher education at Master's level. As for the resources, available for them, let us mention:

- intellectual resource which refers to active participation in development, justification and design of the concept, strategy, the educational standard of SFU;

- social and organizational resource, partnership and creating favorable conditions for new types of practice and apprenticeship for Masters;

- financial resource for material support of gifted students in different fields of knowledge, for supply of the digital environment with the necessary equipment, material support, scientific and methodical maintenance of academic process;

- control and assessment where stakeholders act as outer experts for tracking the achievement dynamics in the field of education, taking into consideration stakeholders' requirements, expectations and values.

As E.V. Ushakova claims, it is education that provides sustainability to the nature of life of new generations and defines the future of the country (Ushakova 1988). Therefore, not only higher school teachers bear responsibility for the quality of higher education, but also all parties interested in educational process. Stakeholders put financial resources in development of the new model of digital educational environment at Southern Federal University:

1. 30% of the content of the General Educational Program is in an electronic form; existing online courses enable Masters to gain theoretical knowledge independently, to analyze modern trends, to reveal problems of science and education and define their own objectives in the form of research, pedagogical, innovative projects;

2. Creation of the platform and information resource, provided to educators and Masters, allow them to join professional research dialogue both in real time and asynchronously;

3. Boundless opportunities for Master's degree students in the choice of sources of knowledge and navigation aids in digital space. Master graduates gain ability to apply the mastered professional competences relevant in promptly developing digital world;

5. Creation of the digital educational environment of higher school funded by stakeholders opens a system-based format of equipping the digital educational environment for the sake of finding independent solutions to arising pedagogical problems of the European scale.

Discussions

Research into the preparation of Masters in Pedagogical Education, optimization of resources for ensuring its high quality and efficiency allowed stating the need to modernize the system of teaching Masters in Pedagogical Education in the context of relevant global, national and regional challenges. At the same time, a number of debatable questions demanding discussion in professional community have been revealed:

- Whether the level of Master's education has to face regional challenges if higher education is focused on academic mobility of a student and integration into international educational space?

- What can be cultural and national context of the designated models of professional pedagogical education?

- What place is taken by student teaching practice in development of design and research competences by Masters, breakthrough advancing technologies?

- In what aspect does professional position of a teacher of higher educational institution change in the digital educational environment of higher school?

Conclusions

The conducted research raised the problem of quality assurance and efficiency of Masters' preparation facing up to modern global, national and regional trends. The system of social challenges that has an impact on training of Masters of education has been revealed.

The main psychological and pedagogical conditions which change the process of training Master's graduates in the field of education in the context of system social calls and a portrait of the student of Southern Federal University as the consumer of educational services are defined:

- The concept of development of pedagogical education at Southern Federal University;

- The strategy of Masters' preparation in the direction "Pedagogical Education";

- The stakeholder-focused model of Masters' preparation at Southern Federal University.

There is no doubt that the description of an image of a new type of Master's degree graduate with modern professional competences has to correspond to the system calls of modern society. The practical importance of the conducted research at this stage lies in the detailed description, approval and presentation to the professional community of the developed concept of pedagogical and psychological conditions for efficient preparation of Masters who major in the field of education.

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